I claim:

1. A method of processing a lithographic printing plate comprising in order:
   (a) providing a lithographic printing plate comprising (i) a hydrophilic substrate, and (ii) an oleophilic thermosensitive layer comprising a polymeric binder, a urethane (meth)acrylate monomer having at least 6 (meth)acrylate groups, a non-urethane (meth)acrylate monomer having at least 4 (meth)acrylate groups, a free-radical initiator, and an infrared absorbing dye; wherein the weight ratio of said urethane (meth)acrylate monomer to said non-urethane (meth)acrylate monomer is from 0.10 to 3.0; and
   (b) exposing said plate with said infrared laser according to digital imaging information to cause hardening of the thermosensitive layer in the exposed areas.
2. The method of claim 1 wherein said weight ratio of the urethane (meth)acrylate monomer to the non-urethane (meth)acrylate monomer is from 0.15 to 2.0.
3. The method of claim 1 wherein said weight ratio of the urethane (meth)acrylate monomer to the non-urethane (meth)acrylate monomer is from 0.20 to 1.5.
4. The method of claim 1 wherein said weight ratio of the urethane (meth)acrylate monomer to the non-urethane (meth)acrylate monomer is from 0.30 to 1.0.
5. The method of claim 1 wherein said urethane (meth)acrylate monomer has 6 acrylate groups.
6. The method of claim 1 wherein said urethane (meth)acrylate monomer is an aromatic urethane acrylate monomer.
7. The method of claim 1 wherein said urethane (meth)acrylate monomer is an aliphatic urethane acrylate monomer.
8. The method of claim 1 wherein said urethane (meth)acrylate monomer is solid at 25 °C and said non-urethane (meth)acrylate monomer is liquid at 25 °C.
9. The method of claim 1 wherein said thermosensitive layer is semisolid at 25 °C.
10. The method of claim 1 wherein said thermosensitive layer has a monomer to polymer weight ratio of larger than 1.5.
11. The method of claim 1 wherein said thermosensitive layer has a monomer to polymer weight ratio of larger than 2.0.

12. The method of claim 1 wherein said plate further includes a water soluble interlayer interposed between the substrate and the thermosensitive layer; wherein the substrate comprises rough and/or porous surface capable of mechanical interlocking with a coating deposited thereon, and the interlayer is substantially conformally coated on the microscopic surfaces of the substrate and is thin enough in thickness, to allow bonding between the thermosensitive layer and the substrate through mechanical interlocking.
13. The method of claim 1 wherein said plate further includes a water soluble or dispersible overcoat on the thermosensitive layer.
14. The method of claim 1 wherein said plate is further developed with an aqueous developer comprising 1 to 40% by weight of an alcohol solvent and 60 to 99% by weight of water, said alcohol solvent being a water-soluble organic solvent having at least one hydroxyl group.
15. The method of claim 1 wherein said polymeric binder is soluble in an alkaline aqueous solution and said plate is further developed with an alkaline aqueous developer.
16. The method of claim 1 wherein said thermosensitive layer is soluble or dispersible in ink and/or fountain solution and said plate is further developed on press with ink and/or fountain solution.
17. The method of claim 1 wherein said thermosensitive layer is soluble or dispersible in ink and/or fountain solution and said plate is imagewise exposed with said infrared laser while mounted on the plate cylinder of a lithographic press and then on-press developed with ink and/or fountain solution.
18. A method of processing a lithographic printing plate comprising in order:
    (a) providing a lithographic printing plate comprising (i) a hydrophilic substrate, (ii) an oleophilic thermosensitive layer comprising a polymeric binder, a urethane (meth)acrylate monomer having at least 6 (meth)acrylate groups, a non-urethane (meth)acrylate monomer having at least 4 (meth)acrylate groups, a free-radical initiator, and an infrared absorbing dye, and (iii) a water soluble or dispersible overcoat; wherein the weight ratio of said urethane (meth)acrylate monomer to

said non-urethane (meth)acrylate monomer is from 0.10 to 3.0, and said thermosensitive layer is soluble or dispersible in ink and/or fountain solution;

(b) exposing said plate with said infrared laser according to digital imaging information to cause hardening of the thermosensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and fountain solution on a lithographic printing press to remove the overcoat and the non-hardened areas of the thermosensitive layer, and to lithographically print images from said plate to the receiving medium.

19. The method of claim 18 wherein said plate further includes a water soluble interlayer interposed between the substrate and the thermosensitive layer; wherein the substrate comprises rough and/or porous surface capable of mechanical interlocking with a coating deposited thereon, and the interlayer is substantially conformally coated on the microscopic surfaces of the substrate and is thin enough in thickness, to allow bonding between the thermosensitive layer and the substrate through mechanical interlocking.

20. The method of claim 18 wherein said plate is imagewise exposed with said infrared laser while mounted on the plate cylinder of said lithographic printing press.

21. A method of processing a lithographic printing plate comprising in order:

(a) providing a lithographic printing plate comprising (i) a hydrophilic substrate, (ii) an oleophilic thermosensitive layer comprising a polymeric binder, a urethane (meth)acrylate monomer having at least 6 (meth)acrylate groups, a non-urethane (meth)acrylate monomer having at least 4 (meth)acrylate groups, a free-radical initiator, and an infrared absorbing dye, and (iii) a water soluble or dispersible overcoat; wherein the weight ratio of said urethane (meth)acrylate monomer to said non-urethane (meth)acrylate monomer is from 0.10 to 3.0;

(b) exposing said plate with said infrared laser according to digital imaging information to cause hardening of the thermosensitive layer in the exposed areas; and

(c) developing said plate with an aqeuous developer to remove the overcoat and the non-hardened areas of the thermosensitive layer.

22. The method of claim 21 wherein said aqueous developer comprises 1 to 40% by weight of an alcohol solvent and 60 to 99% by weight of water, and has a pH of 4.0 to 10.0, said alcohol solvent being a water-soluble organic solvent having at least one hydroxyl group.

23. The method of claim 21 wherein said polymeric binder is soluble in an alkaline aqueous solution, and said aqueous developer is an alkaline aqueous developer having a pH of from 10.0 to 14.0.

24. A lithographic printing plate comprising (i) a hydrophilic substrate, (ii) an oleophilic thermosensitive layer comprising a polymeric binder, a urethane (meth)acrylate monomer having at least 6 (meth)acrylate groups, a non-urethane (meth)acrylate monomer having at least 4 (meth)acrylate groups, a free-radical initiator, and an infrared absorbing dye, and (iii) a water soluble or dispersible overcoat; wherein the weight ratio of said urethane (meth)acrylate monomer to said non-urethane (meth)acrylate monomer is from 0.10 to 3.0, and said thermosensitive layer is capable of hardening upon exposure to an infrared laser.